

Telephone Consultative Committee Recommendation T.50 or in International Organization for Standardization, International Standard ISO 646 (1983), and extensions as provided for in CCITT Recommendation T.61 (Malaga-Torremolinos, 1984) (commonly known as ASCII).

(4) An amateur station transmitting a RTTY or data emission using a digital code specified in this paragraph may use any technique whose technical characteristics have been documented publicly, such as CLOVER, G-TOR, or PacTOR, for the purpose of facilitating communications.

(b) Where authorized by §§97.305(c) and 97.307(f) of this part, a station may transmit a RTTY or data emission using an unspecified digital code, except to a station in a country with which the United States does not have an agreement permitting the code to be used. RTTY and data emissions using unspecified digital codes must not be transmitted for the purpose of obscuring the meaning of any communication. When deemed necessary by an EIC to assure compliance with the FCC Rules, a station must:

- (1) Cease the transmission using the unspecified digital code;
- (2) Restrict transmissions of any digital code to the extent instructed;
- (3) Maintain a record, convertible to the original information, of all digital communications transmitted.

[54 FR 25857, June 20, 1989, as amended at 54 FR 39537, Sept. 27, 1989; 56 FR 56172, Nov. 1, 1991; 60 FR 55486, Nov. 1, 1995]

**§97.311 SS emission types.**

(a) SS emission transmissions by an amateur station are authorized only for communications between points within areas where the amateur service is regulated by the FCC and between an area where the amateur service is regulated by the FCC and an amateur station in another country that permits such communications. SS emission transmissions must not be used for the purpose of obscuring the meaning of any communication.

(b) A station transmitting SS emissions must not cause harmful interference to stations employing other authorized emissions, and must accept all

interference caused by stations employing other authorized emissions.

(c) When deemed necessary by a District Director to assure compliance with this part, a station licensee must:

- (1) Cease SS emission transmissions;
- (2) Restrict SS emission transmissions to the extent instructed; and
- (3) Maintain a record, convertible to the original information (voice, text, image, etc.) of all spread spectrum communications transmitted.

(d) The transmitter power must not exceed 100 W under any circumstances. If more than 1 W is used, automatic transmitter control shall limit output power to that which is required for the communication. This shall be determined by the use of the ratio, measured at the receiver, of the received energy per user data bit ( $E_b$ ) to the sum of the received power spectral densities of noise ( $N_0$ ) and co-channel interference ( $I_0$ ). Average transmitter power over 1 W shall be automatically adjusted to maintain an  $E_b/(N_0 + I_0)$  ratio of no more than 23 dB at the intended receiver.

[64 FR 51471, Sept. 23, 1999]

**§97.313 Transmitter power standards.**

(a) An amateur station must use the minimum transmitter power necessary to carry out the desired communications.

(b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

(c) No station may transmit with a transmitter power exceeding 200 W PEP on:

- (1) The 3.675–3.725 MHz, 7.10–7.15 MHz, 10.10–10.15 MHz, and 21.1–21.2 MHz segments;
- (2) The 28.1–28.5 MHz segment when the control operator is a Novice Class operator or a Technician Class operator who has received credit for proficiency in telegraphy in accordance with the international requirements; or
- (3) The 7.050–7.075 MHz segment when the station is within ITU Regions 1 or 3.

(d) No station may transmit with a transmitter power exceeding 25 W PEP on the VHF 1.25 m band when the control operator is a Novice operator.